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Exhibit R-2, RDT&E BUDGET ITEM JUSTIFICATION											DATE February 1999	
APPROPRIATION/BUDGET ACTIVITY											R-1 ITEM NOMENCLATURE	
RDT&E, DEFENSE-WIDE/BUDGET ACTIVITY 7											Endurance Unmanned Aerial Vehicles (EUAV) PE 0305205D8Z	

COST (IN MILLIONS)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Cost to Complete	Total Cost
Total PE Cost	181.165	*	*	*	*	*	*	*	*	*
Project Name/No. and Subtotal Cost Global Hawk (CONV HAE)/P804	93.509	*	*	*	*	*	*	*	*	*
Project Name/No. and Subtotal Cost DarkStar (LO-HAE)/P805	41.898	*	*	*	*	*	*	*	*	*
Project Name/No. and Subtotal Cost HAE Common Ground Segment/P807	45.758	*	*	*	*	*	*	*	*	*
Quantity of RDT&E Articles										

* Per the FY 1999 Appropriations Act, the funds for FY 99 were transferred to the Services/Defense Agencies in various PEs; per the Program Decision Memorandum (PDM), the EUAV Program funds for FY00-05 were transferred to the Air Force (PE 0305205F).

A. Mission Description and Budget Item Justification

Brief Description of Element: This program includes the Medium Altitude Endurance (MAE) - Conventional High Altitude Endurance (CONV HAE) - Global Hawk; Low Observable High Altitude Endurance (LO HAE) - DarkStar; HAE UAV Common Ground Segment (CGS) and associated support items. These systems will provide all-weather, day/night, reconnaissance and surveillance in direct support of the Joint Forces Commander. They integrate existing airborne reconnaissance architectures for mission planning, data processing, exploitation and dissemination.

COST (IN MILLIONS)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Cost to Complete	Total Cost
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Exhibit R-2, RDT&E BUDGET ITEM JUSTIFICATION											DATE February 1999	
APPROPRIATION/BUDGET ACTIVITY											R-1 ITEM NOMENCLATURE	
RDT&E, DEFENSE-WIDE/BUDGET ACTIVITY 7											Endurance Unmanned Aerial Vehicles (EUAV) PE 0305205D8Z	

Total PE Cost	181.165	*	*	*	*	*	*	*	*	*
Total Project Cost/No. and Subtotal Cost	93.509	*	*	*	*	*	*	*	*	*
Global Hawk (CONV HAE)/P804										
Quantity of RDT&E Articles										

* Per the FY 1999 Appropriations Act, the funds for FY 99 were transferred to the Services/Defense Agencies in various PEs; per the Program Decision Memorandum (PDM), the Global Hawk funds for FY00-05 were transferred to the Air Force (PE 0305205F).

A. Mission Description and Budget Item Justification

Brief Description of Element: The High Altitude Endurance (HAE) UAV Advanced Concept Technology Demonstration (ACTD) program consists of two types of air vehicles, the Conventional HAE (CONV HAE) - Global Hawk and a Low Observable HAE (LO HAE) - DarkStar, and a Common Ground Segment (CGS), common and interoperable with both types of air vehicles (A/Vs). The DarkStar and HAE UAV Common Ground Segment projects are documented separately. The objective of the program is to place the assets in the hands of the warfighter as quickly as possible to assess the utility of the system in the context of military exercises with other service/theater systems. The execution of the Global Hawk project is dependent on funding of the HAE UAV Common Ground Segment project which contains the ground segment RDT&E, and government developmental and demonstration support funding for both Global Hawk and DarkStar A/Vs. The Global Hawk will provide continuous, all-weather, day/night, wide area reconnaissance and surveillance in direct support of the Joint Forces Commander. The system consists of aircraft, sensors, communications and interfaces to theater systems to support tactical warfighters at various levels of command. The Global Hawk will be a fully automatic, high altitude, long endurance unmanned aircraft that is directly responsive to Theater force tasking. The Global Hawk will integrate with the existing tactical airborne reconnaissance architectures for mission planning, data processing, exploitation, and dissemination. It will provide both wide area search radar and Electro Optical (EO) or Infrared Radar (IR) imagery (40,000 sq nm per mission) at 1m resolution and up to 1900 spot images per mission at 0.3m resolution, and will support targeting accuracy of at least 20m CEP. The Global Hawk is the primary “workhorse” of the HAE UAV ACTD system and will be capable of supporting an estimated

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80 percent of all military HAE UAV operational reconnaissance needs. It will be designed for long endurance, high altitude, standoff, image collection capabilities. The Global Hawk will operate in low-to-moderate air defense threat environments with the ability to fly above, standoff, and look into high threat areas. This project is categorized as Budget Activity 7 because it provides for technologies and capabilities in support of Operational System Development.

Program Accomplishments and Plans: (\$ in millions)

FY 1998 Accomplishments: (\$93.509)

- Continued development and integrate design updates (\$24.598)
- Continued fabrication and integration of the demonstration A/Vs (#3, #4, #5) (\$38.319)
- Provided contractor participation in planning for test and evaluation of military utility (\$10.043)
- Provided contractor fabrication, demonstration and evaluation support (\$20.549)

*** Per the FY 1999 Appropriations Act, the funds for FY 99 were transferred to the Services/Defense Agencies in various PEs; per the Program Decision Memorandum (PDM), the Global Hawk funds for FY00-05 were transferred to the Air Force (PE 0305205F).**

Acquisition Strategy: The HAE system will be procured as a design-to-cost program to acquire maximum reconnaissance capability for a firm unit flyaway price (UFP) of \$10M (FY94\$) per vehicle (including payload). Global Hawk was selected at the end of a competition involving multiple contractor teams. Streamlined procurement, using DARPA's Other Transaction Authority, is being used to delete all non value-added tasks and documentation from the program. Under the Developmental Phase agreement, the contractor is responsible for building and testing two Global Hawk air vehicles. As part of this agreement, the contractor will also build a developmental ground segment. During the Demonstration Phase, program management responsibility will transition to the Air Force. Funding for the ACTD program ends in the first quarter of FY2000. Funding for the post ACTD RDT&E and production begins in FY2001.

B. Program Change Summary

Total

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Exhibit R-2, RDT&E BUDGET ITEM JUSTIFICATION		DATE February 1999
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	
RDT&E, DEFENSE-WIDE/BUDGET ACTIVITY 7	Endurance Unmanned Aerial Vehicles (EUAV) PE 0305205D8Z	

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Cost</u>
Previous President's Budget	95.2	*	*	*	*
Net Change	<u>(1.7)</u>	*	*	*	
President's Budget Request	93.5	*	*	*	*

* Per the FY 1999 Appropriations Act, the funds for FY 99 were transferred to the Services/Defense Agencies in various PEs; per the Program Decision Memorandum (PDM), the Global Hawk funds for FY00-05 were transferred to the Air Force (PE 0305205F).

Change Summary Explanation:

Funding: The change in funding is a result of internal realignments within the DARPA.

Schedule: N/A

Technical: N/A

C. Other Program Funding Summary Cost

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>To Complete</u>	<u>Total Cost</u>
HAE CGS, RDT&E, DW	45.758	*	*	*	*	*	*	*	*	*
DarkStar, RDT&E, DW	41.898	*	*	*	*	*	*	*	*	*

* Per the FY 1999 Appropriations Act, the funds for FY 99 were transferred to the Services/Defense Agencies in various PEs; per the Program Decision Memorandum (PDM), the Global Hawk funds for FY00-05 were transferred to the Air Force (PE 0305205F).

D. Schedule Profile

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Exhibit R-2, RDT&E BUDGET ITEM JUSTIFICATION		DATE February 1999
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	
RDT&E, DEFENSE-WIDE/BUDGET ACTIVITY 7	Endurance Unmanned Aerial Vehicles (EUAV) PE 0305205D8Z	

Fiscal Year actual and planned events by quarter

	<u>FY 1998</u>				<u>FY 1999</u>				<u>FY 2000</u>				<u>FY 2001</u>			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Test & Evaluation Milestones																
Flight Readiness Review																
Start Developmental Flight Tests																
Contract Milestones																
Demonstration Support Award																
Other Program Events																
Fabricate Demonstration Air Vehicles																

* Per the FY 1999 Appropriations Act, the funds for FY 99 were transferred to the Services/Defense Agencies in various PEs; per the Program Decision Memorandum (PDM), the Global Hawk funds for FY00-05 were transferred to the Air Force (PE 0305205F).

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Exhibit R-2, RDT&E BUDGET ITEM JUSTIFICATION										DATE February 1999	
APPROPRIATION/BUDGET ACTIVITY								R-1 ITEM NOMENCLATURE			
RDT&E, DEFENSE-WIDE/BUDGET ACTIVITY 7								Endurance Unmanned Aerial Vehicles (EUAV) PE 0305205D8Z			

COST (IN MILLIONS)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Cost to Complete	Total Cost
Total PE Cost	181.165	*	*	*	*	*	*	*	*	*
Total Project Cost/No. and Subtotal Cost DarkStar (LO-HAE)/P805	41.898	*	*	*	*	*	*	*	*	*
Quantity of RDT&E Articles										

* Per the FY 1999 Appropriations Act, the funds for FY 99 were transferred to the Services/Defense Agencies in various PEs; per the Program Decision Memorandum (PDM), the DarkStar funds for FY00-05 were transferred to the Air Force (PE 0305205F).

A. Mission Description and Budget Item Justification

Brief Description of Element: The High Altitude Endurance (HAE) UAV Advanced Concept Technology Demonstration (ACTD) program consists of two types of air vehicles, the Conventional HAE (CONV HAE) - Global Hawk and a Low Observable HAE (LO HAE) - DarkStar, and a Common Ground Segment (CGS), common and interoperable with both types of air vehicles. The Global Hawk and the HAE UAV Common Ground Segment projects are documented separately. The objective of this program is to place the assets in the hands of the warfighter as quickly as possible to assess the utility of the system via military exercises with other service/theater systems. The execution of the DarkStar project is dependent on funding of the HAE UAV Common Ground Segment project which contains the ground segment RDT&E and government developmental and demonstration support funding for both DarkStar and Global Hawk A/Vs. The DarkStar will provide continuous, all-weather, day/night, wide area reconnaissance and surveillance in direct support of the Joint Forces Commander. The system consists of aircraft, sensors, communications and interfaces to theater systems to support tactical warfighters at various levels of command. The DarkStar will integrate with the existing tactical airborne reconnaissance architectures for mission planning, data processing, exploitation, and dissemination. The DarkStar will provide wide area search, over 15,000 sq nm per mission, with either the Electro Optical (EO) or Synthetic Aperture Radar (SAR) sensors at 1m resolution. In addition, the DarkStar is capable of 600 spot images per mission with either sensor at 0.3m resolution. The search and spot modes can be interleaved with attendant reductions in the overall coverage. The system will support a targeting accuracy of at least 20m CEP. The stealth capabilities of the DarkStar allow the system to operate in high threat environments before

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Exhibit R-2, RDT&E BUDGET ITEM JUSTIFICATION		DATE February 1999
APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE
RDT&E, DEFENSE-WIDE/BUDGET ACTIVITY 7		Endurance Unmanned Aerial Vehicles (EUAV) PE 0305205D8Z

suppression of enemy air defenses (SEAD) where manned reconnaissance and the Global Hawk are not viable options. The optimization of this UAV for survivability means the UAV is less capable than the Global Hawk in terms of total endurance and payload capability. This project is categorized as Budget Activity 7 because it provides for technologies and capabilities in support of Operational System Development.

Program Accomplishments and Plans: (\$ in millions)

FY 1998 Accomplishments: (\$41.898)

- Continued fabrication of DarkStar demonstration A/Vs (#3, #4) (\$10.085)
- Completed rebuild and checkout of DarkStar A/V #2 (\$14.845)
- Completed development of DarkStar to include qualification of an operational configuration air data system (\$0.829)
- Provided contractor participation in planning for test and evaluation of military utility (\$7.759)
- Provided fabrication, demonstration and evaluation support (\$8.380)

* Per the FY 1999 Appropriations Act, the funds for FY 99 were transferred to the Services/Defense Agencies in various PEs; per the Program Decision Memorandum (PDM), the DarkStar funds for FY00-05 were transferred to the Air Force (PE 0305205F).

Acquisition Strategy: The LO HAE system will be procured as a design-to-cost program to acquire the most reconnaissance capability for a firm unit flyaway price of \$10 million (FY94\$) per air vehicle (including payload). DarkStar was a sole-source award that leveraged substantial previous government investment in low-observable technology. Streamlined procurement using DARPA's Other Transaction Authority is being used to delete all non value-added tasks and documentation from the program. During the Demonstration Phase (previously referred to as Phase III), program management responsibility will transition to the Air Force. Funding for the ACTD program ends in the first quarter of FY2000. Funding for post ACTD and production begins in FY 2001.

B. Program Change Summary

Total

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Exhibit R-2, RDT&E BUDGET ITEM JUSTIFICATION		DATE February 1999
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE Endurance Unmanned Aerial Vehicles (EUAV) PE 0305205D8Z	
RDT&E, DEFENSE-WIDE/BUDGET ACTIVITY 7		

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Cost</u>
Previous President's Budget	42.6	*	*	*	*
Net Change	(.7)				
President's Budget Request	41.9	*	*	*	*

* Per the FY 1999 Appropriations Act, the funds for FY 99 were transferred to the Services/Defense Agencies in various PEs; per the Program Decision Memorandum (PDM), the DarkStar funds for FY00-05 were transferred to the Air Force (PE 0305205F).

Change Summary Explanation:

Funding: The change in funding is a result of internal realignments within the DARP.

Schedule: N/A

Technical: N/A

C. Other Program Funding Summary Cost

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>To Complete</u>	<u>Total Cost</u>
Global Hawk, RDT&E, DW	93.509	*	*	*	*	*	*	*	*	*
HAE CGS, RDT&E, DW	45.758	*	*	*	*	*	*	*	*	*

* Per the FY 1999 Appropriations Act, the funds for FY 99 were transferred to the Services/Defense Agencies in various PEs; per the Program Decision Memorandum (PDM), the DarkStar funds for FY00-05 were transferred to the Air Force (PE 0305205F).

D. Schedule Profile

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APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE
RDT&E, DEFENSE-WIDE/BUDGET ACTIVITY 7		Endurance Unmanned Aerial Vehicles (EUAV) PE 0305205D8Z

Fiscal Year actual and planned events by quarter

	<u>FY 1998</u>				<u>FY 1999</u>				<u>FY 2000</u>				<u>FY 2001</u>			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Test & Evaluation Milestones																
Resume Developmental Flight Tests				X												
Contract Milestones																
Demonstration Support Agreement Award				X												
Other Program Events																
Fabricate Demonstration Air Vehicles																

* Per the FY 1999 Appropriations Act, the funds for FY 99 were transferred to the Services/Defense Agencies in various PEs; per the Program Decision Memorandum (PDM), the DarkStar funds for FY00-05 were transferred to the Air Force (PE 0305205F).

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Exhibit R-3, RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN		DATE September 1998
APPROPRIATION/BUDGET ACTIVITY RDT&E, DEFENSE-WIDE/BUDGET ACTIVITY 7	R-1 ITEM NOMENCLATURE Endurance Unmanned Aerial Vehicles (EUAV) PE 0305205D8Z/P806	

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Exhibit R-2, RDT&E BUDGET ITEM JUSTIFICATION										DATE February 1999	
APPROPRIATION/BUDGET ACTIVITY								R-1 ITEM NOMENCLATURE			
RDT&E, DEFENSE-WIDE/BUDGET ACTIVITY 7								Endurance Unmanned Aerial Vehicles (EUAV) PE 0305205D8Z			

COST (IN MILLIONS)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Cost to Complete	Total Cost
Total PE Cost	181.165	*	*	*	*	*	*	*	*	*
Total Project Cost/No. Subtotal Cost	45.758	*	*	*	*	*	*	*	*	*
HAE Common Ground Segment/P807										
Quantity of RDT&E Articles										

* Per the FY 1999 Appropriations Act, the funds for FY 99 were transferred to the Services/Defense Agencies in various PEs; per the Program Decision Memorandum (PDM), the CGS funds for FY00-05 were transferred to the Air Force (PE 0305205F).

A. Mission Description and Budget Item Justification

Brief Description of Element: The High Altitude Endurance (HAE) UAV Advanced Concept Technology Demonstration (ACTD) program consists of two types of air vehicles, the Conventional HAE (CONV HAE) - Global Hawk and a Low Observable HAE (LO HAE) - DarkStar, and a Common Ground Segment (CGS) which is interoperable with both types of air vehicles. The HAE UAV CGS is comprised of a Launch and Recovery Element (LRE), a Mission Control Element (MCE), and associated logistics support activities. The HAE UAV Common Ground Segment integrates many technologies for communications between the Global Hawk, DarkStar, and exploitation centers/users. Without the HAE UAV Common Ground Segment project, the Global Hawk and DarkStar projects cannot be executed. The LRE prepares, launches, and recovers the air vehicles. The MCE plans and executes the mission; dynamically re-tasks the air vehicles, including the sensors; and processes, stores and/or disseminates the data as required. The CGS supports tactical warfighters at various levels of command with digital, near real-time, high quality imagery in exploitable form. Prior to fielding of an integrated CGS, an Interim Ground Segment (IGS) composed of the Global Hawk LRE #1/MCE #1, and the DarkStar Launch Control Recovery System (LCRS) and Data Processing Element (DPE) will be used to conduct flight test and CGS development. The HAE UAV CGS project also funds government support and studies, GFE, and field demonstration support for both the Global Hawk and DarkStar systems. This Project is categorized as Budget Activity 7 because it provides funds for technologies and capabilities in support of Operational System Development.

Program Accomplishments and Plans: (\$ in millions)

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Exhibit R-2, RDT&E BUDGET ITEM JUSTIFICATION		DATE February 1999
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	
RDT&E, DEFENSE-WIDE/BUDGET ACTIVITY 7	Endurance Unmanned Aerial Vehicles (EUAV) PE 0305205D8Z	

FY 1998 Accomplishments: (\$45.758)

- Completed development, integration and testing of developmental CGS (IGS) and performance testing with DarkStar A/V (\$11.103)
- Continued development of enhanced planning capability for Global Hawk and DarkStar to support military utility evaluation (\$4.337)
- Continued development and test of demonstration CGS (\$10.822)
- Provided contractor participation in planning for test and evaluation of military utility (\$1.641)
- Provided government test and evaluation support (\$5.949)
- Conducted service exploitation system interface development for integration and test (\$1.270)
- Performed CGS, Global Hawk, and DarkStar government support, studies, and related tasks (\$9.867)
- Conducted assessment of Y2K impact on HAE UAV system (\$0.769)

* Per the FY 1999 Appropriations Act, the funds for FY 99 were transferred to the Services/Defense Agencies in various PEs; per the Program Decision Memorandum (PDM), the CGS funds for FY00-05 were transferred to the Air Force (PE 0305205F).

Acquisition Strategy: The HAE UAV Common program provides the ground segment and support items common to the Global Hawk and DarkStar demonstrations. During the development phase, the ground segment originally designed for Global Hawk will be modified to include the capability to; 1) launch and recover; 2) command and control; and 3) receive, process, and disseminate DarkStar sensor data. Addition of this capability defines the Common Ground Segment (CGS) configuration. One (1) developmental and one (1) demonstration CGS are planned to be fabricated during the ACTD. Streamlined procurement, using DARPA's Other Transaction Authority, is being used to delete all non value-added tasks and documentation from the program. During the Demonstration Phase, program management responsibility will transition to the Air Force. Funding for the ACTD program ends in the first quarter of FY 2000. Funding for post ACTD RDT&E begins in FY2001.

B. <u>Program Change Summary</u>	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Total Cost</u>
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Exhibit R-2, RDT&E BUDGET ITEM JUSTIFICATION						DATE
APPROPRIATION/BUDGET ACTIVITY						February 1999
RDT&E, DEFENSE-WIDE/BUDGET ACTIVITY 7						R-1 ITEM NOMENCLATURE Endurance Unmanned Aerial Vehicles (EUAV) PE 0305205D8Z

Previous President's Budget	46.6	*	*	*	*
Net Change	(.8)				
President's Budget Request	45.8	*	*	*	*

* Per the FY 1999 Appropriations Act, the funds for FY 99 were transferred to the Services/Defense Agencies in various PEs; per the Program Decision Memorandum (PDM), the CGS funds for FY00-05 were transferred to the Air Force (PE 0305205F).

Change Summary Explanation:

Funding: The change in funding is a result of internal realignments within the DARPA.

Schedule: N/A

Technical: N/A

C. Other Program Funding Summary Cost

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>To Complete</u>	<u>Total Cost</u>
Global Hawk, RDT&E, DW	93.509	*	*	*	*	*	*	*	*	*
DarkStar, RDT&E, DW	41.898	*	*	*	*	*	*	*	*	*

Related Activities. The Global Hawk program cannot be executed without the complementary HAE UAV Common Ground Segment project. This project also supports the DarkStar project.

* Per the FY 1999 Appropriations Act, the funds for FY 99 were transferred to the Services/Defense Agencies in various PEs; per the Program Decision Memorandum (PDM), the CGS funds for FY 00-05 were transferred to the Air Force (PE 0305205F).

D. Schedule Profile

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Exhibit R-2, RDT&E BUDGET ITEM JUSTIFICATION		DATE February 1999
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	
RDT&E, DEFENSE-WIDE/BUDGET ACTIVITY 7	Endurance Unmanned Aerial Vehicles (EUAV) PE 0305205D8Z	

Fiscal Year actual and planned events by quarter.

	<u>FY 1998</u>				<u>FY 1999</u>				<u>FY 2000</u>				<u>FY 2001</u>			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Test & Evaluation Milestones																
Flight Readiness Review					—	X										
Start Developmental Flight Test with Global Hawk						X										
Contract Milestones																
Demonstration Support Agreement Award							X									
Other Program Events																
Fabricate Demonstration Common Ground Segment (CGS)					—							X				

* Per the FY 1999 Appropriations Act, the funds for FY 99 were transferred to the Services/Defense Agencies in various PEs; per the Program Decision Memorandum (PDM), the CGS funds for FY00-05 were transferred to the Air Force (PE 0305205F).

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Exhibit R-3 Cost Analysis (page 1)									DATE February 1999			
APPROPRIATION/BUDGET ACTIVITY				PROGRAM ELEMENT					PROJECT NAME AND NUMBER			
RDT&E, DEFENSE-WIDE/BUDGET ACTIVITY 7				PE 0305205D8Z					Endurance Unmanned Aerial Vehicles (EUAV)/P804			
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY Cost	1999 Cost*	1999 Award Date	2000 Cost *	2000 Award Date	2001 Cost *	2001 Award Date	Cost to Complete *	Total Cost *	Target Value of Contract
AV 3-5 Fabrication	C/CPFF/IF/AF	Teledyne Ryan Aeronautical (TRA)	12.846									
Development & Test/AV 1&2 Fabric.	C/CPFF/IF	TRA	69.970									
Award Fee for AV 3-5 Fabrication	AF	San Diego, CA	2.108									
Contractor Acquired Property	C/CPFF	TRA	1.514									
Miscellaneous			1.025									
Subtotal Product Development			87.463									
Remarks												
Development Support												
Software Development												
Training Development												
Integrated Logistics Support												
Configuration Management												
Technical Data												
GFE												
Subtotal Support												
Remarks												

Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 1 of 2)

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Exhibit R-3 Cost Analysis (page 2)									DATE February 1999			
APPROPRIATION/BUDGET ACTIVITY				PROGRAM ELEMENT					PROJECT NAME AND NUMBER			
RDT&E, DEFENSE-WIDE/BUDGET ACTIVITY 7				PE 0305205D8Z					Endurance Unmanned Aerial Vehicles (EUAV)/P804			
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY Cost	1999 Cost*	1999 Award Date	2000 Cost *	2000 Award Date	2001 Cost *	2001 Award Date	Cost to Complete *	Total Cost *	Target Value of Contract
Demonstration & Evaluation Support	C/CPFF/IF	TRA	3.139									
Integrated Logistics Support	C/CPFF	TRA	3.907									
Tooling												
GFE												
Subtotal T&E			6.046									
Remarks												
Contractor Engineering Support												
Government Engineering Support												
Program Management Support												
Program Management Personnel												
Travel												
Labor (Research Personnel)												
Overhead												
Subtotal Management												
Remarks												
Total Cost			93.509									
Remarks												
* Per the FY 1999 Appropriations Act, the funds for FY 99 were transferred to the Services/Defense Agencies in various PEs; per the Program Decision Memorandum (PDM), the Global Hawk funds for FY00-05 were transferred to the Air Force (PE 0305205F).												

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Exhibit R-3 Cost Analysis (page 1)									DATE February 1999			
APPROPRIATION/BUDGET ACTIVITY				PROGRAM ELEMENT					PROJECT NAME AND NUMBER			
RDT&E, DEFENSE-WIDE/BUDGET ACTIVITY 7				PE 0305205D8Z					Endurance Unmanned Aerial Vehicles (EUAV)/P805			
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY Cost	1999 Cost*	1999 Award Date	2000 Cost *	2000 Award Date	2001 Cost *	2001 Award Date	Cost to Complete *	Total Cost *	Target Value of Contract
Air Vehicle (AV) 3-4 Fabrication	SS/CPIF	Lockheed Martin	6.146									
Design, Develop and Fabricate AV 1-2	SS/CPIF	Palmdale, CA	27.994									
Miscellaneous												
GFE												
Award Fees												
Subtotal Product Development			34.140									
Remarks												
Development Support												
Software Development												
Training Development												
Integrated Logistics Support												
Configuration Management												
Technical Data												
GFE												
Subtotal Support												
Remarks												

Exhibit R-3, Project Cost Analysis
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Exhibit R-3 Cost Analysis (page 2)									DATE February 1999			
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT						PROJECT NAME AND NUMBER			
RDT&E, DEFENSE-WIDE/BUDGET ACTIVITY 7			PE 0305205D8Z						Endurance Unmanned Aerial Vehicles (EUAV)/P805			
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY Cost	1999 Cost*	1999 Award Date	2000 Cost *	2000 Award Date	2001 Cost *	2001 Award Date	Cost to Complete *	Total Cost *	Target Value of Contract
Demonstration and Evaluation Support	SS/CPIF	LMSW	7.758									
Subtotal T&E			7.758									
Remarks												
Contractor Engineering Support												
Government Engineering Support												
Program Management Support												
Program Management Personnel												
Travel												
Labor (Research Personnel)												
Overhead												
Subtotal Management												
Remarks												
Total Cost			41.898									
Remarks												
* Per the FY 1999 Appropriations Act, the funds for FY 99 were transferred to the Services/Defense Agencies in various PEs; per the Program Decision Memorandum (PDM), the DarkStar funds for FY00-05 were transferred to the Air Force (PE 0305205F).												

(Exhibit R-3, page 2 of 2)

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Exhibit R-3 Cost Analysis (page 1)									DATE February 1999			
APPROPRIATION/BUDGET ACTIVITY				PROGRAM ELEMENT					PROJECT NAME AND NUMBER			
RDT&E, DEFENSE-WIDE/BUDGET ACTIVITY 7				PE 0305205D8Z					Endurance Unmanned Aerial Vehicles (EUAV)/P807			
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY Cost	1999 Cost*	1999 Award Date	2000 Cost *	2000 Award Date	2001 Cost *	2001 Award Date	Cost to Complete *	Total Cost *	Target Value of Contract
Fabricate Demonstration CGS	C/CPAF/IF	Raytheon Systems Group (RSG), Falls Church, VA	12.956									
Fabricate Developmental CGS	C/CPAF	RSG	24.240									
User Recommended Improvements	C/CPAF		3.343									
Common Imagery Processor	C/CPAF	ESC, Hanscom AFB	1.255									
Miscellaneous												
Subtotal Product Development			41.794									
Remarks												
Development Support												
Software Development												
Training Development												
Integrated Logistics Support												
Configuration Management												
Technical Data												
Miscellaneous												
Subtotal Support												
Remarks												

Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 1 of 2)

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Exhibit R-3 Cost Analysis (page 2)									DATE February 1999			
APPROPRIATION/BUDGET ACTIVITY				PROGRAM ELEMENT					PROJECT NAME AND NUMBER			
RDT&E, DEFENSE-WIDE/BUDGET ACTIVITY 7				PE 0305205D8Z					Endurance Unmanned Aerial Vehicles (EUAV)/P807			
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY Cost	1999 Cost*	1999 Award Date	2000 Cost *	2000 Award Date	2001 Cost *	2001 Award Date	Cost to Complete *	Total Cost *	Target Value of Contract
Government Support	Allot	AFFTC/Edwards AFB	1.333									
Government Support	Allot	AFOTEC/Kirtland AFB	.867									
Government Support	Allot	NAWC-AD/Pax River	.726									
CGS Spares	C/CPFF	RSG	.938									
Repair Support												
CGS Demonstration Support	C/CPFF	RSG	0.100									
Miscellaneous												
Subtotal T&E			3.964									
Remarks												
Contractor Engineering Support												
Government Engineering Support												
Program Support												
Miscellaneous												
Travel												
Labor (Research Personnel)												
Overhead												
Subtotal Management												
Remarks												
Total Cost			45.758									
Remarks												
* Per the FY 1999 Appropriations Act, the funds for FY 99 were transferred to the Services/Defense Agencies in various PEs; per the Program Decision Memorandum (PDM), the HAE CGS funds for FY00-05 were transferred to the Air Force (PE 0305205F).												

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